

PERMANENT MAGNET ROTOR

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Inventor: OIKAWA TOMOAKI; TAJIMA TSUNEYOSHI;
YAMASHIRO YUKIHIRO; SUZUKI YASUMASA;
YONETANI HARUYUKI; DAIKOKU AKIHIRO; SAKABE
MOICHI

Applicant: MITSUBISHI ELECTRIC CORP

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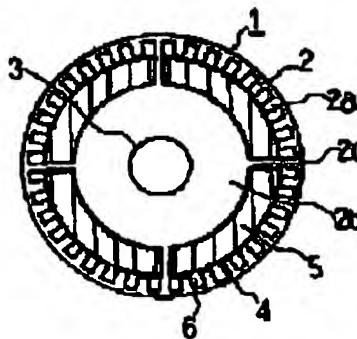
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Abstract of JP9131009

PROBLEM TO BE SOLVED: To obtain a permanent magnet rotor excellent in die-cut property of a rotor iron core, since reluctance torque can be made use of, by providing a slit at the periphery opposite to a magnet insertion hole. **SOLUTION:** Since a slit 6 is arranged in the section opposed to a permanent magnet 5 for a field, out of the periphery 2a of the rotor iron core 2, the magnetic resistance of a q-axis magnetic path is not affected by the slit 6, and the magnetic flux by the winding of a stator is easy to pass. Accordingly, reluctance torque can be made use of, and especially, it leads to the improvement to efficiency at high load. Moreover, at the periphery 2a, the opening of the slit 6 is provided inside in the diametrical direction of the periphery 2a, so the friction resistance between the media at the periphery of the rotor is little, and the drop of efficiency caused by the friction resistance with the medium can be prevented. Moreover, when inserting the permanent magnet 5 for a field at the time of assembly, each slit piece performs the role as a press spring, so smooth insertion can be made, absorbing the error in processing.



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